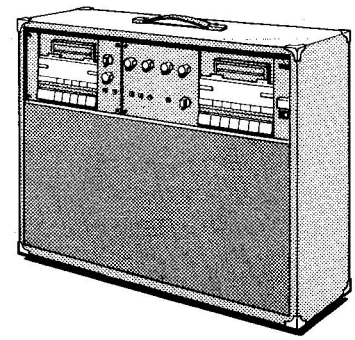
Cassette recorder amplifier D6650/30R

Service
Service
Service



ServiceManual

TABLE OF CONTENTS

Specification 2
Connection & Controls 2
Wiring Diagram ..... 3 - 5
Adjustment Table 6
Assembly Drawing
Echo Board 6
Main Board ..... 7 - 8
Circuit Diagram
Main Board ..... 9 - 10
Echo Board ..... 11 - 12
Exploded view ..... 13 - 14
Partslist ..... 15 ff

Annex
Service Manual RN8
Service Manual RN9

(GB) Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

(D) Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Gerätes darf nicht verändert werden. Für Reparaturen sind Originalersatzteile zu verwenden.

(I) Le norme di sicurezza estigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambiago identici a quelli specificati.

(F) Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

(NL) Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

Published by Consumer Electronics Printed in The Netherlands Copyright reserved Subject to modification (GB) 4822 725 24916

PHILIPS

PHILIPS

CS 51 860

Specification

General

Mains voltage	:	220V / 50Hz
ext. battery	:	12 – 14V (Center pin minus)
Power consumption	:	≤50W at maximum output power

Amplifier

Output power	:	≥15W at 8Ω D=10% (mains)
Output power	:	≥10W at 8Ω D=10% (ext. battery)
Headphone	:	6,3mm stereo jack

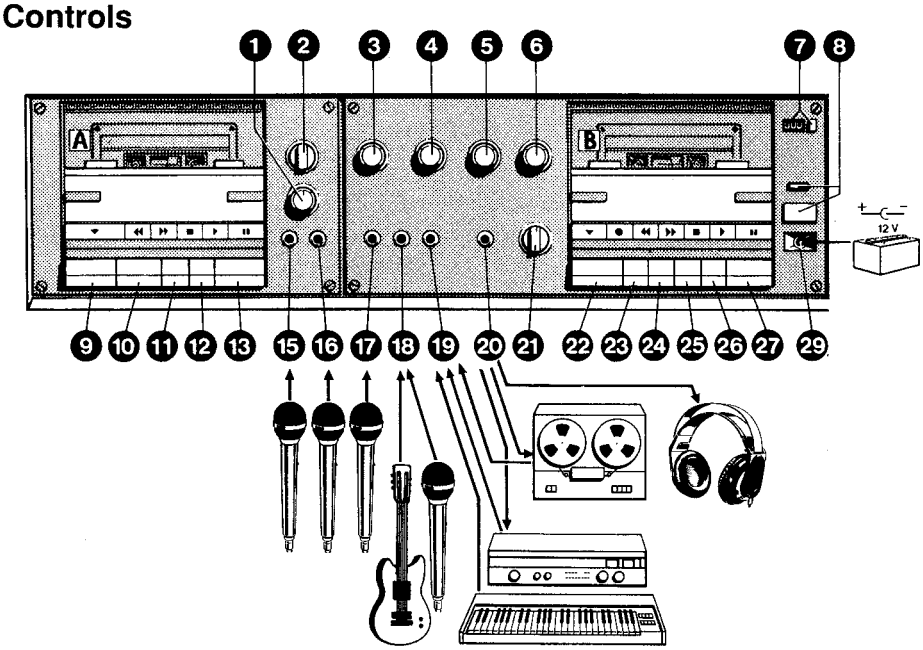
Recorder mode

Tape speed	:	4,76cm/s ±2%
Wow & Flutter	:	≤0,35%
Winding speed	:	≤130s for C60 cassette
Pitch control (Deck A)	:	12% typ.
Frequency response within 8 dB	:	80Hz – 10kHz
Frequency response (copy mode)	:	80Hz – 8kHz (within 10 dB)
Erasing system	:	AC 50kHz
Erasing distance	:	≥60dB at 330Hz

Input sensitivity

Micro A,B, C	:	2mV / 2kΩ
Guitar	:	20mV / 39kΩ
Aux.	:	200mV / 470kΩ

Connection & Controls



1	VOLUME TAPE A MIC1 MIC2	R500
2	SPEED TAPE A	R550
3	MASTER VOLUME	R201
4	TAPE B VOLUME	R202
5	BASS CONTROL	R209
6	TREBLE CONTROL	R212
7	TAPE COUNTER + RESET	-
8	POWER ON/OFF SWITCH	SK401
	INDICATION	6401
9	STOP/EJECT TAPE A 1024, 1027	
10	PLAY TAPE A	1024, 1027
11	FAST REWIND TAPE A	1024, 1027
12	FAST FORWARD TAPE A	1024, 1027
13	PAUSE TAPE A	-
15	MIC1 INPUT JACK	BU701
16	MIC2 INPUT JACK	BU702
17	MIC3 INPUT JACK	BU301
18	GUITAR INPUT JACK BU302	
19	AUX. INPUT JACK	BU303
20	OUTPUT LINE	BU304
21	ECHO CONTROL	R308
22	STOP/EJECT TAPE B 1034, 1037	
23	RECORD TAPE B	1034, 1037, SK1
24	PLAY TAPE B	1034, 1037
25	FAST REWIND TAPE B	1034, 1037
26	FAST FORWARD TAPE B	1034, 1037
27	PAUSE TAPE B	-
29	EXT. DC SOCKET	BU401

WIRING DIAGRAM

8005

8004

Woofer

1002

Tweeter

1003

RN 8 Tape transport
(right hand deck)

Rec/Pb head

1030

Erase head

1032

Motor(bottom view)

1033

B A + -

1034

Motor on/off

1037

RN 9 Tape transport
(left hand deck)

Pb head

1021

Motor (b

8021

8004

8006

8005

8005

8004

8103

8101

8007

Copperside

8101

8103

Copperside

5001

2

N

1

3

4

8114

8114

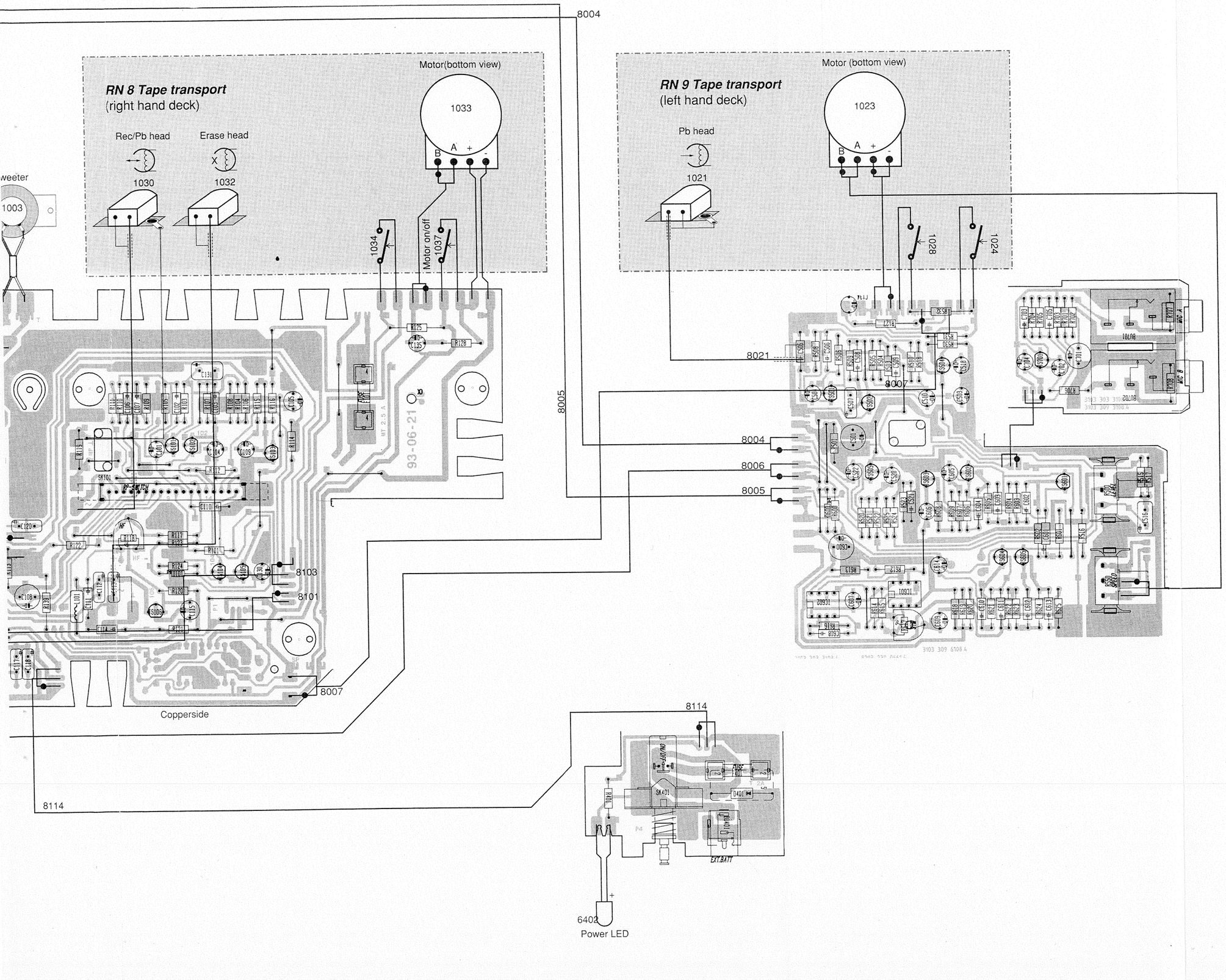
SK401

D401

EXT.BATT

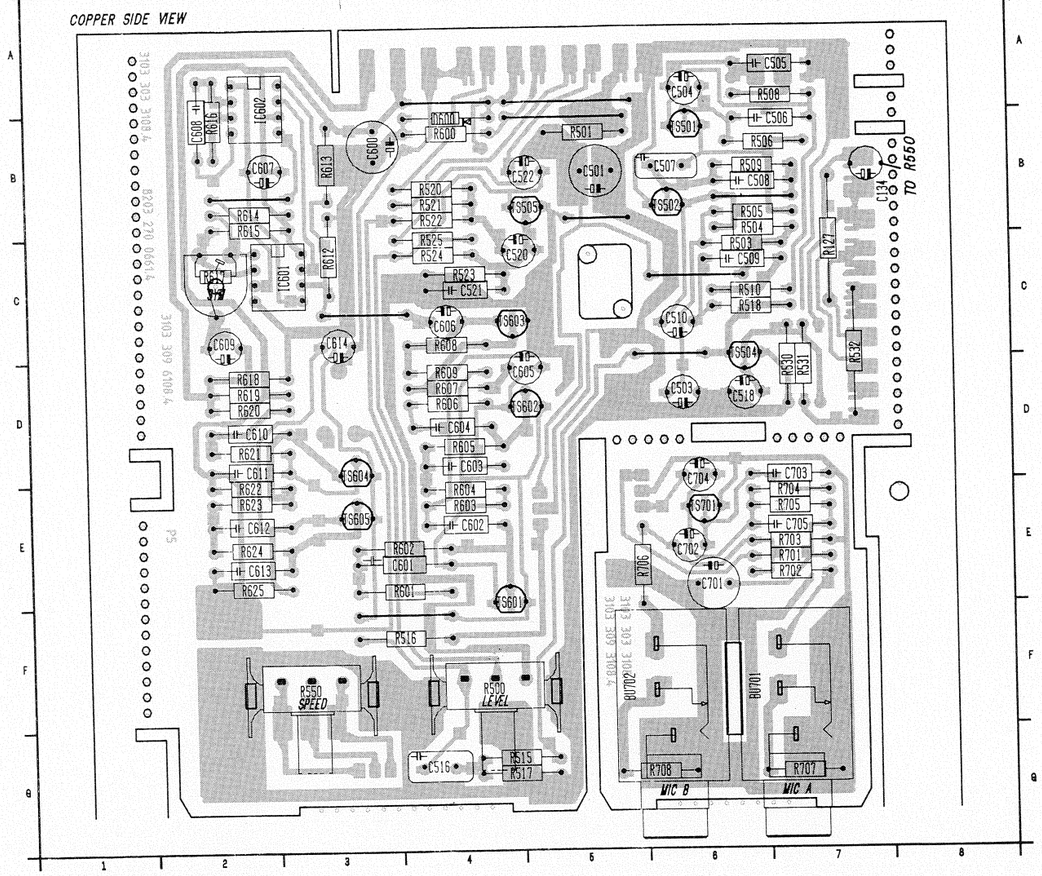
6402

Power LED


RN 8 Tape transport
(right hand deck)
Motor(bottom view)
1033
A + -
B
Rec/Pb head
Erase head
1030
1032
1034
Motor on/off
1037
weeter
1003
8004
8005
8103
8101
8007
Copperside
8114
RN 9 Tape transport
(left hand deck)
Motor (bottom view)
1023
Pb head
1021
1028
1024
8021
8004
8006
8005
8007
8114
ON/OFF
FUSE
SK401
D401
EXT.BATT
6402
Power LED

Assembly Drawing *ECHO BOARD*

BU701	F 6	C508	B 6	C601	E 4	C610	D 2	C705	E 7	R505	B 6	R520	B 4	R550	F 3	R608	C 4	R619	D 2	R703	E 7	TS505	B 5
BU702	F 5	C509	C 6	C602	E 4	C611	D 2	D600	B 4	R506	B 7	R521	B 4	R600	B 4	R609	D 4	R620	D 2	R704	E 7	TS601	E 4
C134	B 7	C510	C 6	C603	D 4	C612	E 2	IC601	C 3	R508	A 7	R522	B 4	R601	E 4	R612	C 3	R621	D 2	R705	E 7	TS602	D 5
C501	B 5	C516	G 4	C604	D 4	C613	E 2	IC602	A 2	R509	B 6	R523	C 4	R602	E 4	R613	B 3	R622	E 2	R706	E 5	TS603	C 4
C503	D 6	C518	D 6	C605	D 5	C614	C 3	R127	C 7	R510	C 6	R524	C 4	R603	E 4	R614	B 2	R623	E 2	R707	G 7	TS604	D 3
C504	A 6	C520	C 5	C606	C 4	C701	E 6	R500	F 4	R515	G 4	R525	C 4	R604	E 4	R615	B 2	R624	E 2	R708	G 6	TS605	E 3
C505	A 7	C521	C 4	C607	B 2	C702	E 6	R501	B 5	R516	F 4	R530	D 7	R605	D 4	R616	B 2	R625	E 2	TS501	B 6	TS701	E 6
C506	B 7	C522	B 5	C608	B 2	C703	D 7	R503	C 6	R517	G 4	R531	D 7	R606	D 4	R617	C 2	R701	E 7	TS502	B 6		
C507	B 6	C600	B 3	C609	C 2	C704	D 6	R504	B 6	R518	C 6	R532	C 7	R607	D 4	R618	D 2	R702	E 7	TS504	C 6		



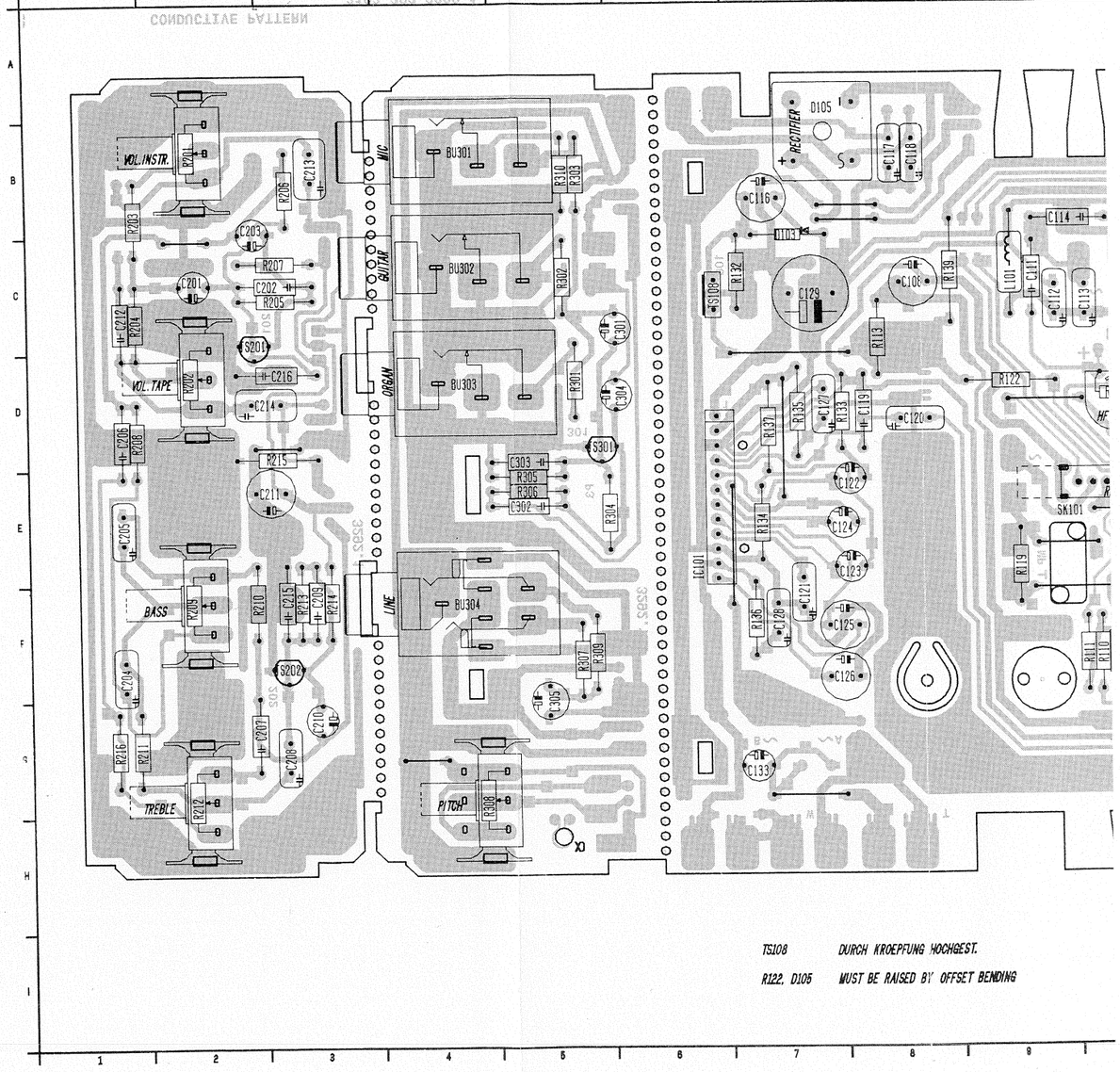
Adjustment table

Adjustment	Cassette	Mode	Measure on	Read on	Adjust with	Adjust to
Playback speed A-Deck	SBC420 3150Hz	Play Pitch = 0	BU304	Wow & Flutter meter	Preset in motor Deck A	0 ±1%
Playback speed B-Deck	SBC420 3150Hz	Play	BU304	Wow & Flutter meter	Preset in motor Deck B	0 ±1%
Azimuth R/Pb head	SBC420 8kHz	Play	BU304	mV meter	Left hand screw R/Pb head	max. output
Bias	any	Rec	MP1	mV meter	R118	7.5mV
Delay clock suppression	-	Echo max. Master vol. max.	BU304	mV meter	R617	min. clock output

SBC420 = 4822 379 30071
The maximum permissible speed deviation is 2%.
Moreover, the wow and flutter value can be read.
This value should not exeed 0.35%.

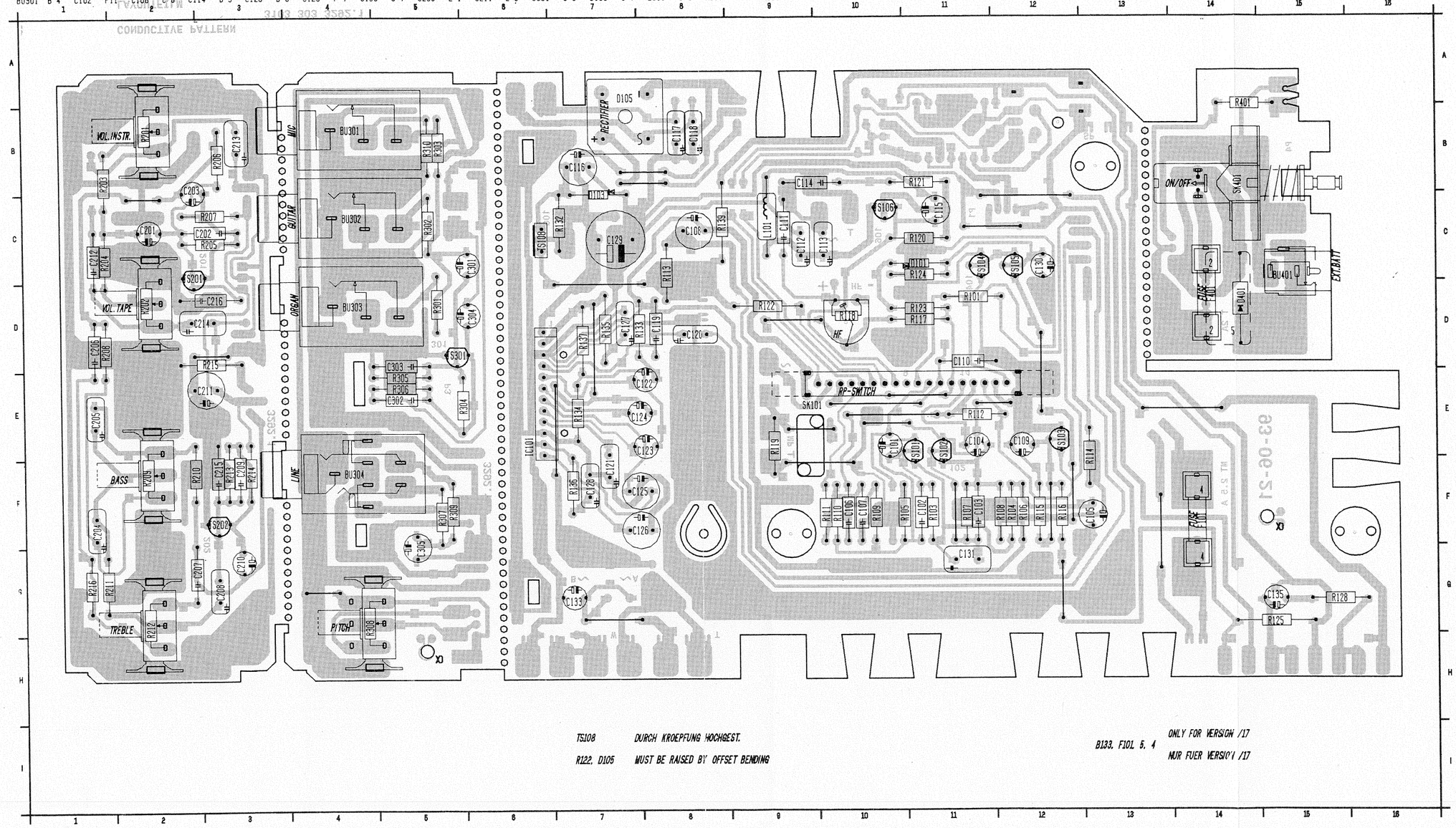
Assembly Drawing *MAIN BOARD*

2	C14	BU302	C 4	C103	F11	C109	E12	C115	C11	C121	F 7	C127	D 7	C135	G15	C206	D 1	C212	C 1	C302	E 5	D105	A 7
2	D14	BU303	D 4	C104	E11	C110	D11	C116	B 7	C122	E 8	C128	F 7	C201	C 2	C207	G 2	C213	B 3	C303	D 5	D401	D14
4	F14	BU304	F 4	C105	F13	C111	C 9	C117	B 8	C123	E 8	C129	C 7	C202	C 3	C208	G 3	C214	D 3	C304	D 6	F101	F14
4	G14	BU401	C15	C106	F10	C112	C 9	C118	B 8	C124	E 7	C130	C12	C203	B 2	C209	F 3	C215	F 3	C305	G 5	F401	D14
5	D14	C101	E10	C107	F10	C113	C10	C119	D 8	C125	F 7	C131	G11	C204	F 1	C210	G 3	C216	D 3	D101	C11	IC101	E 6
BU301	B 4	C102	F11	C108	C 8	C114	B 9	C120	D 8	C126	F 7	C133	G 7	C205	E 1	C211	E 3	C301	C 6	D103	C 7	L101	C 9

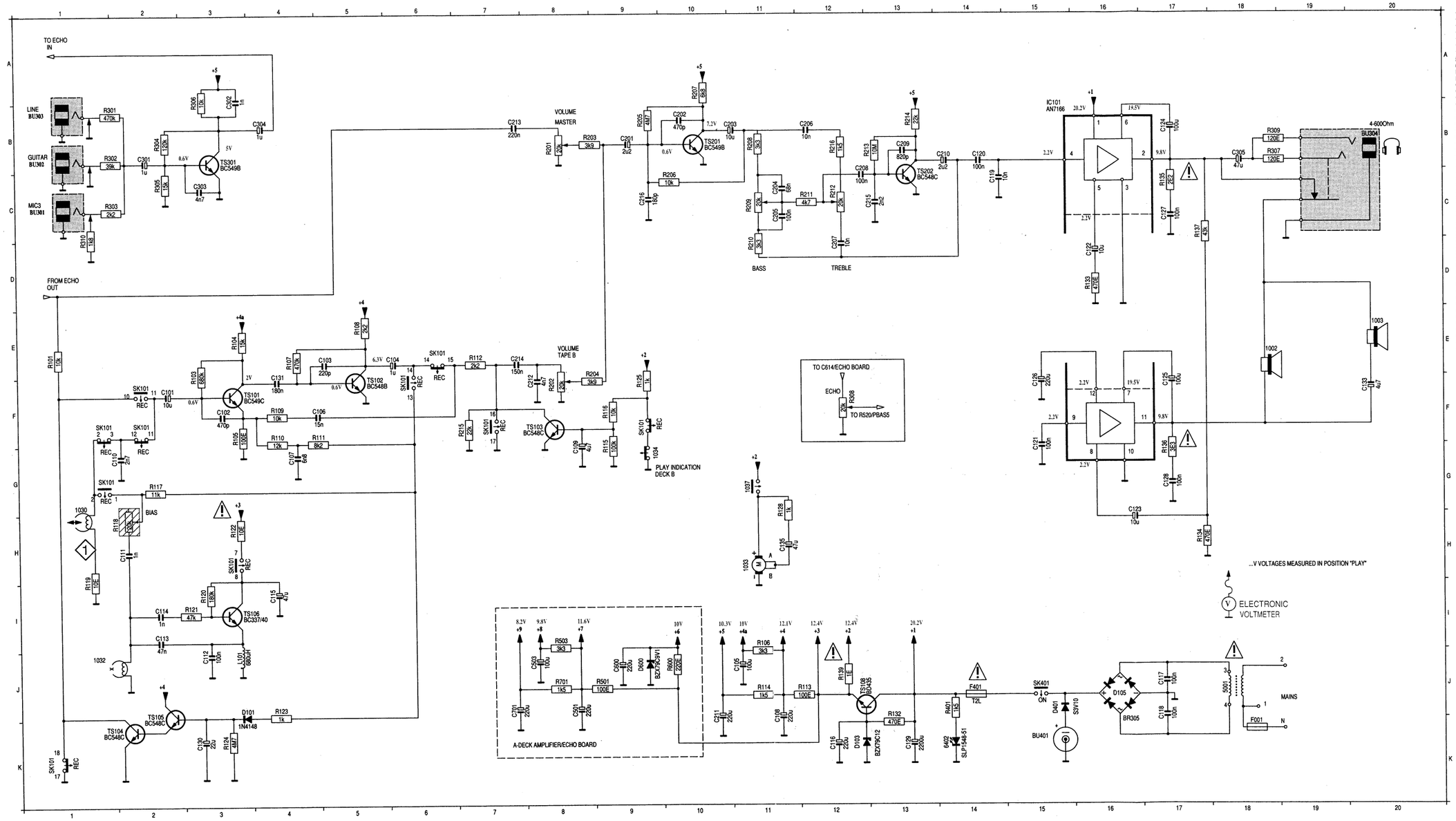


Assembly Drawing *MAIN BOARD*

2	C14	BU302	C 4	C103	F11	C109	E12	C115	C11	C121	F 7	C127	D 7	C135	G15	C206	D 1	C212	C 1	C302	E 5	D105	A 7	R101	D11	R108	F12	R114	E13	R120	C11	R128	G15	R137	D 7	R205	C 3	R211	G 1	R301	D 5	R307	F 5	SK401	B14	TS105	C10
2	D14	BU303	D 4	C104	E11	C110	D11	C116	B 7	C122	E 8	C128	F 7	C201	C 2	C207	G 2	C213	B 3	C303	D 5	D401	D14	R103	F11	R109	F10	R115	F12	R121	B11	R132	C 7	R139	C 8	R206	B 3	R212	G 2	R302	C 5	R308	G 4	TS101	E11	TS108	C 6
4	F14	BU304	F 4	C105	F13	C111	C 9	C117	B 8	C123	E 8	C129	C 7	C202	C 3	C208	G 3	C214	D 3	C304	D 6	F101	F14	R104	F12	R110	F10	R116	F12	R122	D 9	R133	D 8	R201	B 2	R207	C 3	R213	F 3	R303	B 5	R309	F 5	TS102	E11	TS201	C 2
4	G14	BU401	C15	C106	F10	C112	C 9	C118	B 8	C124	E 7	C130	C12	C203	B 2	C209	F 3	C215	F 3	C305	G 5	F401	D14	R105	F11	R111	F10	R117	D11	R123	D11	R134	E 7	R202	D 2	R208	D 1	R214	F 3	R304	E 6	R310	B 5	TS103	E12	TS202	F 3
5	D14	C101	E10	C107	F10	C113	C10	C119	D 8	C125	F 7	C131	G11	C204	F 1	C210	G 3	C216	D 3	D101	C11	IC101	E 6	R106	F12	R112	E11	R118	D10	R124	C11	R135	D 7	R203	B 1	R209	F 2	R215	D 3	R305	E 5	R401	B14	TS104	C11	TS301	D 5
BU301	B 4	C102	F11	C108	C 8	C114	B 9	C120	D 8	C126	F 7	C133	G 7	C205	E 1	C211	E 3	C301	C 6	D103	C 7	L101	C 9	R107	F11	R113	C 8	R119	E 9	R125	G15	R136	F 7	R204	C 1	R210	F 2	R216	G 1	R306	E 5	SK101	E 9	TS105	C12		

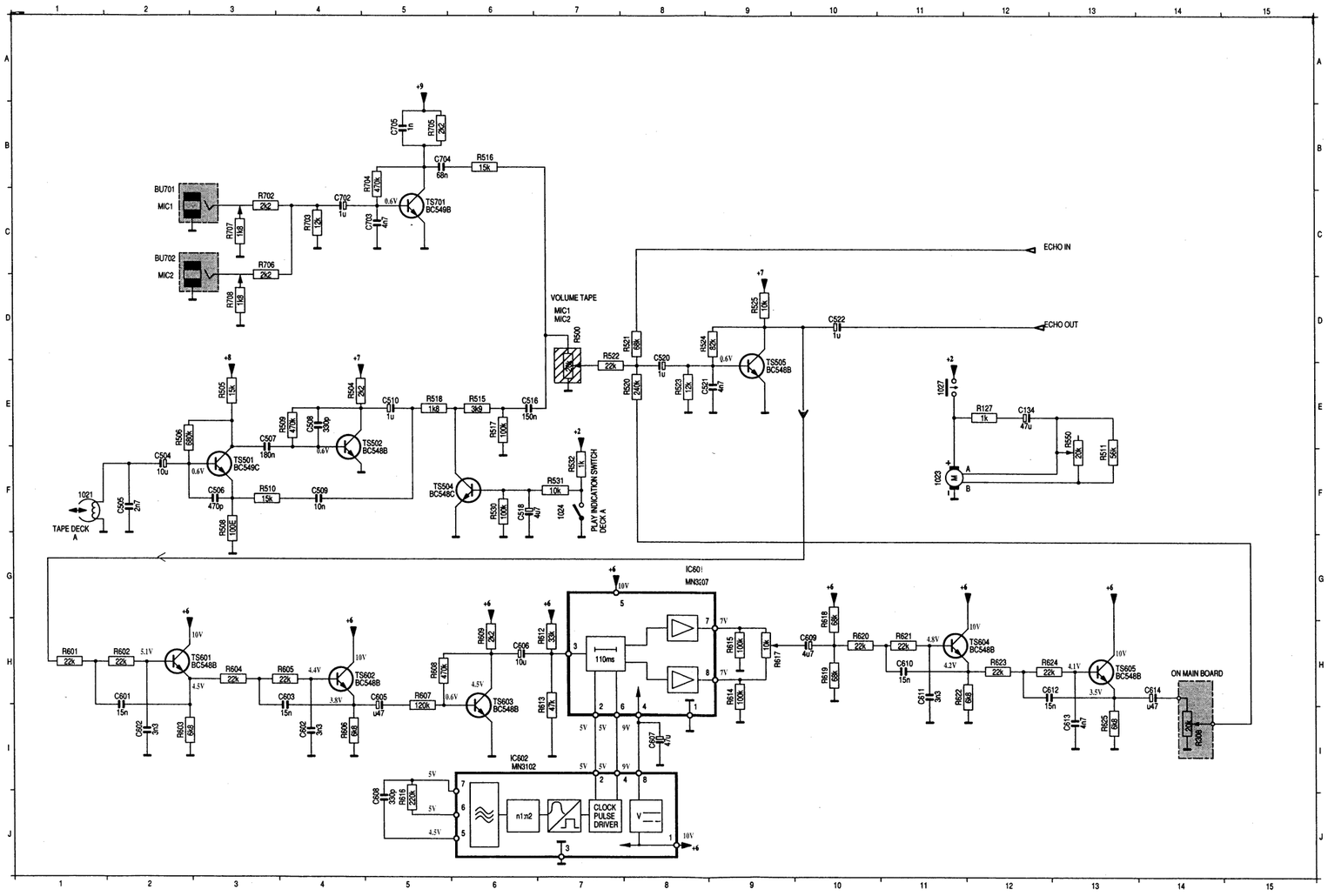


CIRCUIT DIAGRAM
MAIN BOARD



1002 E18
1003 E20
1030 G 1
1032 I 2
1033 H11
1034 G 9
1037 G11
5001 J18
6402 K14
BU304 B20
BU401 K15
C101 F 2
C102 F 3
C103 E 5
C104 E 6
C105 J11
C106 F 5
C107 G 4
C108 J11
C109 G 8
C110 G 2
C111 H 2
C112 J 3
C113 I 2
C114 I 2
C115 I 4
C116 K12
C117 J17
C118 J17
C119 C14
C120 B14
C121 G15
C122 D16
C123 H16
C124 B17
C125 F17
C126 F15
C127 C17
C128 G17
C129 K13
C130 K 3
C131 F 4
C133 F20
C135 H11
C201 B 9
C202 B10
C203 B11
C204 C11
C205 C11
C206 B12
C207 D12
C208 C12
C209 B13
C210 B14
C211 J10
C212 F 8
C213 B 7
C214 E 7
C215 C13
C216 C 9
C301 B 2
C302 A 3
C303 C 3
C304 B 4
C305 B18
C501 J 8
C503 J 8
C600 J 9
C701 J 7
D101 J 3
D103 K12
D105 J16
D401 J15
D600 J 9
F001 K18
F401 J14
IC101 B15
L101 J 3
R101 E 1
R103 E 3
R104 E 3
R105 F 3
R106 I11
R107 E 4
R108 E 5
R109 F 4
R110 F 4
R111 F 5
R112 E 7
R113 J12
R114 J11
R115 G 9
R116 F 9
R117 G 2
R118 H 2
R119 H 1
R120 I 3
R121 I 3
R122 H 3
R123 J 4
R124 K 3
R125 F 9
R128 G11
R132 J13
R133 D16
R134 H17
R135 C17
R136 G17
R137 C17
R139 J12
R201 B 8
R202 F 8
R203 B 9
R204 E 9
R205 B 9
R206 C10
R207 A10
R208 B11
R209 C11
R210 D11
R211 C12
R212 C12
R213 B13
R214 B13
R215 F 7
R216 B12
R301 B 2
R302 B 2
R303 C 2
R304 B 2
R305 C 2
R306 A 3
R307 B18
R308 F12
R309 B18
R310 C 1
R401 J14
R501 J 9
R503 I 8
R600 J10
R701 J 8
SK101 G 1
SK101 F 7
SK101 H 3
SK101 F 1
SK101 F 2
SK101 F 6
SK101 F 2
SK101 E 6
SK101 K 1
SK101 F 9
SK401 J15
TS101 F 3
TS102 F 5
TS103 F 8
TS104 K 2
TS105 J 2
TS106 I 3
TS108 J12
TS201 B10
TS202 C13
TS301 B 3

CIRCUIT DIAGRAM
A-DECK AMPLIFIER / ECHO BOARD



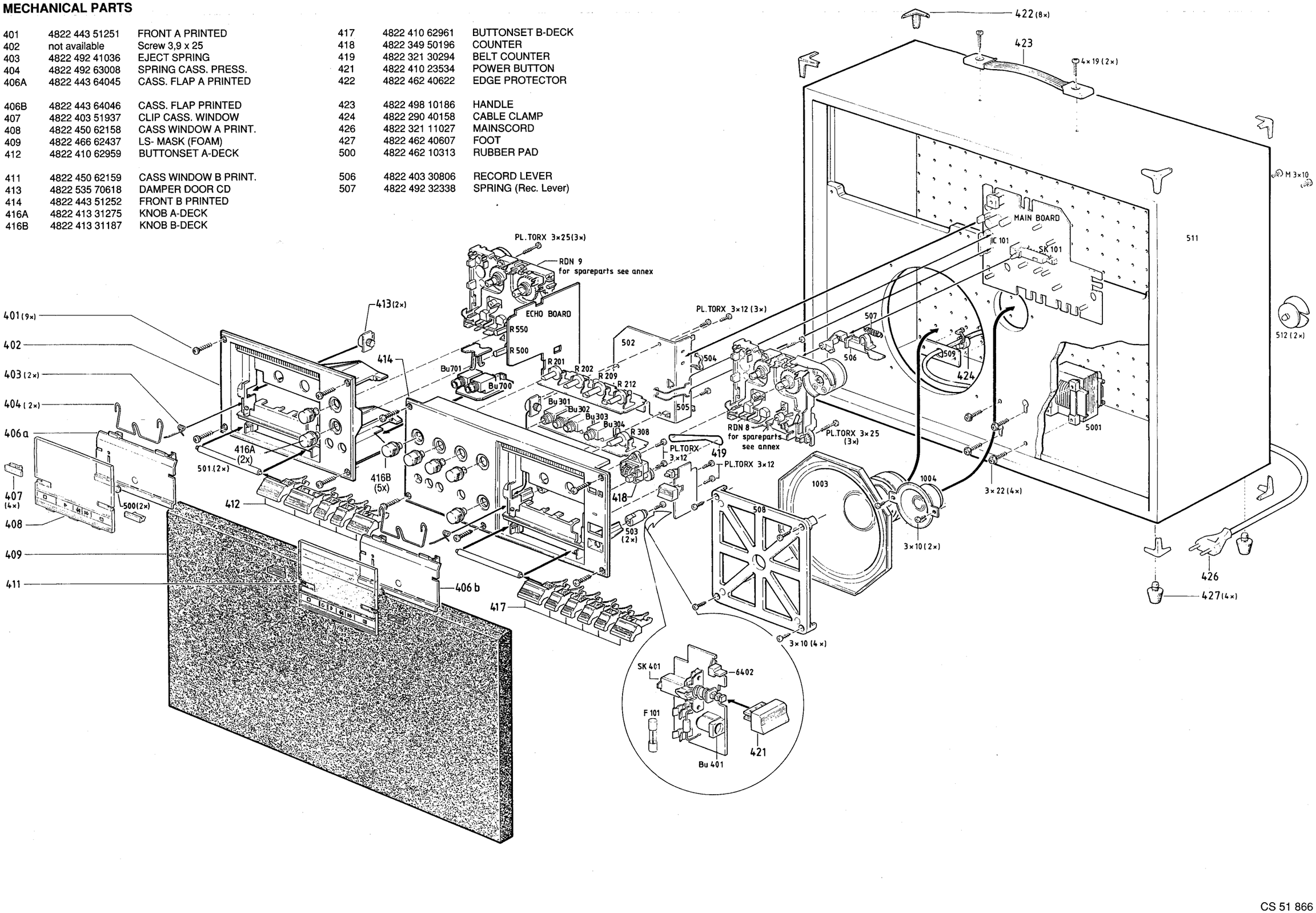
1021 F 1
1023 F11
1024 F 7
1027 E11
BU701 C 2
BU702 C 2
C134 E12
C504 F 2
C505 F 2
C506 F 3
C507 E 3
C508 E 4
C509 F 4
C510 E 5
C516 E 6
C518 F 6
C520 D 8
C521 E 9
C522 D10
C601 H 2
C602 I 2
C603 H 4
C605 H 5
C606 H 6
C607 I 8
C608 J 5
C609 H10
C610 H11
C611 H11
C612 H12
C613 I13
C614 H14
C702 C 4
C703 C 5
C704 B 5
C705 B 5
IC601 G 8
IC602 I 6
R127 E12
R306 I14
R500 D 7
R504 E 4
R505 E 3
R506 E 2
R508 F 3
R509 E 4
R510 F 3
R511 F13
R515 E 6
R516 B 6
R517 E 6
R518 E 5
R520 E 8
R521 D 8
R522 D 7
R523 E 8
R524 D 8
R525 D 9
R530 F 6
R531 F 7
R532 F 7
R550 E13
R601 H 1
R602 H 2
R603 I 2
R604 H 3
R605 H 4
R606 I 4
R607 H 5
R608 H 5
R609 H 6
R612 H 7
R613 H 7
R614 H 9
R615 H 9
R616 J 5
R617 H 9
R618 G10
R619 H10
R620 H10
R621 H11
R622 H11
R623 H12
R624 H12
R625 I13
R702 C 3
R703 C 4
R704 B 5
R705 B 5
R706 C 3
R707 C 3
R708 D 3
TS501 F 3
TS502 E 4
TS504 F 6
TS505 E 9
TS601 H 2
TS602 H 4
TS603 H 6
TS604 H12
TS605 H13
TS701 C 5

EXPLODED VIEW

MECHANICAL PARTS

401	4822 443 51251	FRONT A PRINTED
402	not available	Screw 3,9 x 25
403	4822 492 41036	EJECT SPRING
404	4822 492 63008	SPRING CASS. PRESS.
406A	4822 443 64045	CASS. FLAP A PRINTED
406B	4822 443 64046	CASS. FLAP PRINTED
407	4822 403 51937	CLIP CASS. WINDOW
408	4822 450 62158	CASS WINDOW A PRINT.
409	4822 466 62437	LS- MASK (FOAM)
412	4822 410 62959	BUTTONSET A-DECK
411	4822 450 62159	CASS WINDOW B PRINT.
413	4822 535 70618	DAMPER DOOR CD
414	4822 443 51252	FRONT B PRINTED
416A	4822 413 31275	KNOB A-DECK
416B	4822 413 31187	KNOB B-DECK

417	4822 410 62961	BUTTONSET B-DECK
418	4822 349 50196	COUNTER
419	4822 321 30294	BELT COUNTER
421	4822 410 23534	POWER BUTTON
422	4822 462 40622	EDGE PROTECTOR
423	4822 498 10186	HANDLE
424	4822 290 40158	CABLE CLAMP
426	4822 321 11027	MAINSCORD
427	4822 462 40607	FOOT
500	4822 462 10313	RUBBER PAD
506	4822 403 30806	RECORD LEVER
507	4822 492 32338	SPRING (Rec. Lever)



Electrical partslist

MISCELLANEOUS

	4822 242 30289	MICROPHONE
	4822 492 62373	FUSE HOLDER
SK101	4822 277 30669	SLIDE SWITCH
BU301	4822 267 30345	SOCKET 6,3mm MONO
BU302	4822 267 30345	SOCKET 6,3mm MONO
BU303	4822 267 30345	SOCKET 6,3mm MONO
BU304	4822 264 30228	SOCKET 6,3mm MONO
F401	4822 070 32002	FUSE T2A
SK403	4822 276 11279	SWITCH
BU701	4822 267 30345	SOCKET 6,3mm MONO
BU702	4822 267 30345	SOCKET 6,3mm MONO

DIODES

D101	4822 130 30621	1N4148
D103	4822 130 34197	BZX79-C12 (UAW)
D105	4822 130 31007	BR305
D401	4822 130 33063	S3V10
D600	4822 130 30862	BZX79-C9V1

TRANSISTORS

TS101	4822 130 44246	BC549C
TS102	4822 130 40937	BC548B
TS103	4822 130 44196	BC548C
TS104	4822 130 44196	BC548C
TS105	4822 130 44196	BC548C
TS106	4822 130 41344	BC337-40
TS107	4822 130 44196	BC548C
TS108	5322 130 50405	BD435
TS201	4822 130 40936	BC549B
TS202	4822 130 44196	BC548C
TS301	4822 130 40936	BC549B
TS501	4822 130 44246	BC549C
TS502	4822 130 40937	BC548B
TS504	4822 130 44196	BC548C
TS505	4822 130 40937	BC548B
TS601	4822 130 40937	BC548B
TS602	4822 130 40937	BC548B
TS603	4822 130 40937	BC548B
TS604	4822 130 40937	BC548B
TS605	4822 130 40937	BC548B
TS701	4822 130 40936	BC549B

INTEGRATED CIRCUITS

IC101	4822 209 81503	AN7166

COILS

L101	4822 157 50968	680µH

RESISTORS

R101	4822 116 52233	10k	5%	0,5W
R103	4822 116 52298	680k	5%	0,5W
R104	4822 116 52244	15k	5%	0,5W
R105	4822 116 52175	100R	5%	0,5W
R106	4822 116 52269	3k3	5%	0,5W
R107	4822 116 52285	470k	5%	0,5W
R108	4822 116 52256	2k2	5%	0,16W
R109	4822 116 52233	10k	5%	0,5W
R110	4822 116 52238	12k	5%	0,5W
R111	4822 116 52303	8k2	5%	0,5W
R112	4822 116 52256	2k2	5%	0,16W
R113	4822 116 52175	100R	5%	0,5W
R114	4822 116 52243	1k5	5%	0,16W
R115	4822 116 52234	100k	5%	0,5W
R116	4822 116 52233	10k	5%	0,5W
R117	4822 050 21503	15k	1%	0,6W
R118	4822 100 10079	POTMETER 47k Lin.		
R119	4822 116 52176	10R	5%	0,5W
R120	4822 116 52252	180k	5%	0,5W
R121	4822 116 52284	47k	5%	0,5W
R122	4822 052 10109	10R	5%	0,33W
R123	4822 050 11002	1k	5%	0,2W
R124	4822 111 30893	4M7	5%	0,2W
R125	4822 050 11002	1k	5%	0,2W
R127	4822 050 11002	1k	5%	0,2W
R128	4822 050 11002	1k	5%	0,2W
R130	4822 100 10019	POTMETER 220R Lin.		
R132	4822 050 24701	470R	5%	0,5W
R133	4822 116 52224	470R	5%	0,5W
R134	4822 116 52224	470R	5%	0,5W
R135	4822 052 10228	2R2	5%	0,33W
R136	4822 052 10338	3R3 NFR25		
R137	4822 116 52281	43k	5%	0,5W
R139	4822 052 10108	1R	5%	0,33W
R201	4822 100 20117	POTMETER 20k Log.		
R202	4822 100 20117	POTMETER 20k Log.		
R203	4822 116 52276	3k9	5%	0,5W
R204	4822 116 52276	3k9	5%	0,5W
R205	4822 111 30893	4M7	5%	0,2W
R206	4822 116 52233	10k	5%	0,5W
R207	4822 116 52296	6k8	5%	0,5W
R208	4822 116 52269	3k3	5%	0,5W
R209	4822 100 30043	POTMETER 20k Lin.		
R210	4822 116 52269	3k3	5%	0,5W
R211	4822 116 52283	4k7	5%	0,5W
R212	4822 100 30043	POTMETER 20k Lin.		
R213	4822 050 21006	10M	1%	0,6W
R214	4822 116 52257	22k	5%	0,5W
R215	4822 116 52257	22k	5%	0,5W
R216	4822 116 52243	1k5	5%	0,16W
R301	4822 116 52285	470k	5%	0,5W
R302	4822 116 52277	39k	5%	0,5W
R303	4822 116 52256	2k2	5%	0,16W
R304	4822 050 21204	120k	1%	0,6W
R305	4822 050 21803	18k	1%	0,6W
R306	4822 116 52233	10k	5%	0,5W
R307	4822 116 52206	120R	5%	0,5W
R308	4822 100 30043	POTMETER 20k Lin.		
R309	4822 116 52206	120R	5%	0,5W
R310	4822 116 52249	1k8	5%	0,16W

RESISTORS

R401	4822 050 21502	1k5	1%	0,6W
R500	4822 100 20117	POTMETER 20k Log.		
R501	4822 116 52175	100R	5%	0,5W
R503	4822 116 52269	3k3	5%	0,5W
R504	4822 116 52256	2k2	5%	0,16W
R505	4822 050 21503	15k	1%	0,6W
R506	4822 116 52298	680k	5%	0,5W
R508	4822 116 52175	100R	5%	0,5W
R509	4822 116 52285	470k	5%	0,5W
R510	4822 116 52244	15k	5%	0,5W
R515	4822 116 52276	3k9	5%	0,5W
R516	4822 116 52244	15k	5%	0,5W
R517	4822 116 52234	100k	5%	0,5W
R518	4822 116 52249	1k8	5%	0,16W
R520	4822 116 52262	240k	5%	0,5W
R521	4822 116 52297	68k	5%	0,5W
R522	4822 116 52257	22k	5%	0,5W
R523	4822 050 21203	12k	1%	0,6W
R524	4822 050 28203	82k	1%	0,6W
R525	4822 116 52233	10k	5%	0,5W
R530	4822 116 52234	100k	5%	0,5W
R531	4822 116 52233	10k	5%	0,5W
R532	4822 050 11002	1k	5%	0,2W
R550	4822 100 30043	POTMETER 20k Lin.		
R600	4822 116 52215	220R	5%	0,16W
R601	4822 116 52257	22k	5%	0,5W
R602	4822 116 52257	22k	5%	0,5W
R603	4822 116 52296	6k8	5%	0,5W
R604	4822 116 52257	22k	5%	0,5W
R605	4822 116 52257	22k	5%	0,5W
R606	4822 116 52296	6k8	5%	0,5W
R607	4822 116 52239	120k	5%	0,5W
R608	4822 116 52285	470k	5%	0,5W
R609	4822 116 52256	2k2	5%	0,16W
R612	4822 116 52271	33k	5%	0,16W
R613	4822 116 52284	47k	5%	0,5W
R614	4822 116 52234	100k	5%	0,5W
R615	4822 116 52234	100k	5%	0,5W
R616	4822 116 52258	220k	5%	0,5W
R618	4822 116 52297	68k	5%	0,5W
R619	4822 116 52297	68k	5%	0,5W
R620	4822 116 52257	22k	5%	0,5W
R621	4822 116 52257	22k	5%	0,5W
R622	4822 116 52296	6k8	5%	0,5W
R623	4822 116 52257	22k	5%	0,5W
R624	4822 116 52257	22k	5%	0,5W
R625	4822 116 52296	6k8	5%	0,5W
R701	4822 116 52243	1k5	5%	0,16W
R702	4822 116 52256	2k2	5%	0,16W
R703	4822 116 52238	12k	5%	0,5W
R704	4822 116 52285	470k	5%	0,5W
R705	4822 116 52256	2k2	5%	0,16W
R706	4822 116 52256	2k2	5%	0,16W
R707	4822 116 52249	1k8	5%	0,16W
R708	4822 116 52249	1k8	5%	0,16W

CAPACITORS

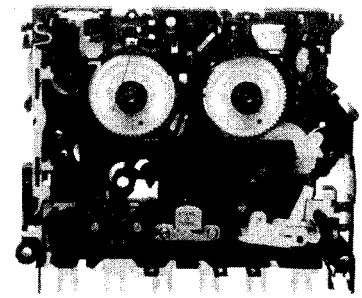
C101	4822 124 40435	10µF	20%	50V
C102	4822 122 31435	470pF	10%	50V
C103	4822 122 10172	220pF	10%	50V
C104	4822 124 40242	1µF	20%	63V
C105	4822 124 41584	100µF	20%	10V
C106	4822 122 31471	15nF	20%	25V
C107	4822 122 31434	6,8nF	20%	50V
C108	4822 124 40196	220µF	20%	16V
C109	4822 124 40246	4,7µF	20%	63V
C110	4822 126 13039	2,7nF	10%	50V
C111	4822 122 10162	1nF	10%	50V
C112	5322 121 42386	100nF	5%	63V
C113	4822 121 41984	47nF	10%	400V
C114	4822 122 10162	1nF	10%	50V
C115	4822 124 40433	47µF	20%	25V
C116	4822 124 40196	220µF	20%	16V
C117	5322 121 42386	100nF	5%	63V
C118	5322 121 42386	100nF	5%	63V
C119	4822 122 31816	10nF	20%	50V
C120	5322 121 42386	100nF	5%	63V
C121	5322 121 42386	100nF	5%	63V
C122	4822 124 40435	10µF	20%	50V
C123	4822 124 40435	10µF	20%	50V
C124	4822 124 40207	100µF	20%	25V
C125	4822 124 40207	100µF	20%	25V
C126	4822 124 40181	220µF	20%	10V
C127	5322 121 42386	100nF	5%	63V
C128	5322 121 42386	100nF	5%	63V
C130	4822 124 40434	22µF	20%	35V
C131	4822 121 51356	180nF	10%	63V
C133	4822 124 40246	4,7µF	20%	63V
C135	4822 124 40433	47µF	20%	25V
C201	4822 124 40244	2,2µF	20%	63V
C202	4822 122 31435	470pF	10%	50V
C203	4822 124 40435	10µF	20%	50V
C204	4822 121 42688	68nF	10%	100V
C205	5322 121 42386	100nF	5%	63V
C206	4822 122 31816	10nF	20%	50V
C207	4822 122 31816	10nF	20%	50V
C208	5322 121 42386	100nF	5%	63V
C209	4822 122 10173	820pF	10%	50V
C210	4822 124 40244	2,2µF	20%	63V
C211	4822 124 40196	220µF	20%	16V
C212	4822 126 11714	4,7nF	20%	
C213	4822 121 42408	220nF	5%	63V
C214	4822 121 41854	150nF	10%	63V
C215	4822 126 12339	2,2nF	10%	16V
C216	4822 126 10053	180pF	10%	50V
C301	4822 124 40242	1µF	20%	63V
C302	4822 122 10162	1nF	10%	50V
C303	4822 126 11714	4,7nF	20%	
C304	4822 124 40242	1µF	20%	63V
C305	4822 124 40433	47µF	20%	25V
C129	4822 124 80777	2200µF	20%	25V
C134	4822 124 40433	47µF	20%	25V
C501	4822 124 40196	220µF	20%	16V
C503	4822 124 41584	100µF	20%	10V
C504	4822 124 40435	10µF	20%	50V
C505	4822 126 13039	2,7nF	10%	50V
C506	4822 122 31435	470pF	10%	50V

CAPACITORS

C507	4822 121 51356	180nF	10%	63V
C508	4822 126 12787	330pF	10%	50V
C509	4822 122 31816	10nF	20%	50V
C510	4822 124 40242	1µF	20%	63V
C516	4822 121 41854	150nF	10%	63V
C518	4822 124 40246	4,7µF	20%	63V
C520	4822 124 40242	1µF	20%	63V
C521	4822 126 11714	4,7nF	20%	
C522	4822 124 40242	1µF	20%	63V
C600	4822 124 40196	220µF	20%	16V
C601	4822 122 31471	15nF	20%	25V
C602	4822 122 10577	3,3nF	10%	16V
C603	4822 122 31471	15nF	20%	25V
C605	4822 124 40239	0,47µF	20%	63V
C606	4822 124 40435	10µF	20%	50V
C607	4822 124 40177	47µF	20%	10V
C608	4822 126 12787	330pF	10%	50V
C609	4822 124 40246	4,7µF	20%	63V
C610	4822 122 31471	15nF	20%	25V
C611	4822 122 10577	3,3nF	10%	16V
C612	4822 122 31471	15nF	20%	25V
C613	4822 126 11714	4,7nF	20%	
C614	4822 124 40239	0,47µF	20%	63V
C701	4822 124 40196	220µF	20%	16V
C702	4822 124 40242	1µF	20%	63V
C703	4822 126 11714	4,7nF	20%	
C704	4822 121 42688	68nF	10%	100V
C705	4822 122 10162	1nF	10%	50V

Tape transport RN8

Service
Service
Service



45 190 A11

For details and exploded view see Service Manual
of tape transport RN/RR, RDN/RDR
(general documentation)

ServiceManual

(GB) MAINTENANCE

It is recommended to clean the recorder after approx. 500 hours of operation.

To be cleaned with alcohol or spirit

- Erase head
- Recording/playback head
- Capstan
- Pressure roller

(NL) ONDERHOUD

Aanbevolen wordt het apparaat na ca. 500 bedrijfsuren schoon te maken

Schoonmaken met alcohol of spiritus:

- Wiskop
- Opneem-/weergeefkop
- Toonas
- Drukrol

(F) ENTRETIEN

L'appareil devra être nettoyé après env. 500 heures de marche aux points les plus importants.

Nettoyer les éléments suivants à l'alcool ou à l'alcool à brûler:

- Tête effacement
- Tête enregistrement/reproduction
- Cabestan
- Galet presseur

(D) WARTUNG

Es empfiehlt sich, das Gerät nach ca. 500 Betriebsstunden zu reinigen

Reinigen mit Alkohol oder Spiritus:

- Löschkopf
- Aufnahme/Wiedergabe-Kopf
- Tonachse
- Andruckrolle

(I) MANUTENZIONE

E consigliabile pulire l'apparecchio dopo circa 500 ore di funzionamento ai punti principali.

Pulire con alcool

- Testina di cancellazione
- Testina di registrazione/riproduzione
- Capstan
- Rullo preminastro

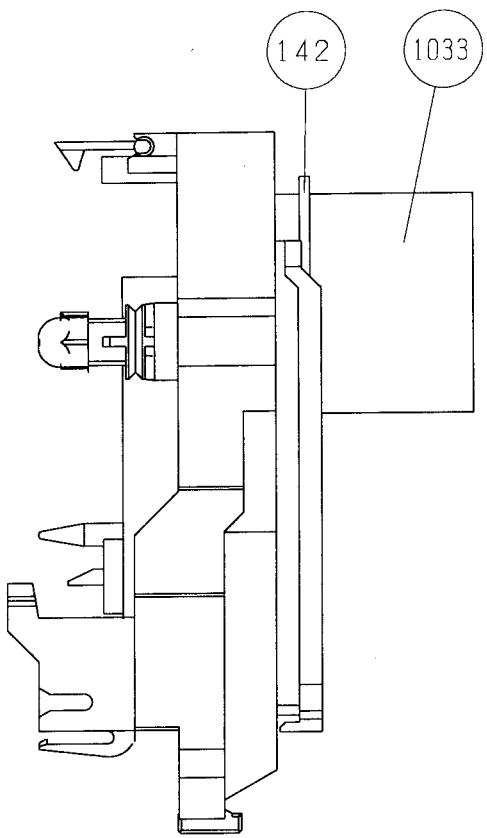
"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne".

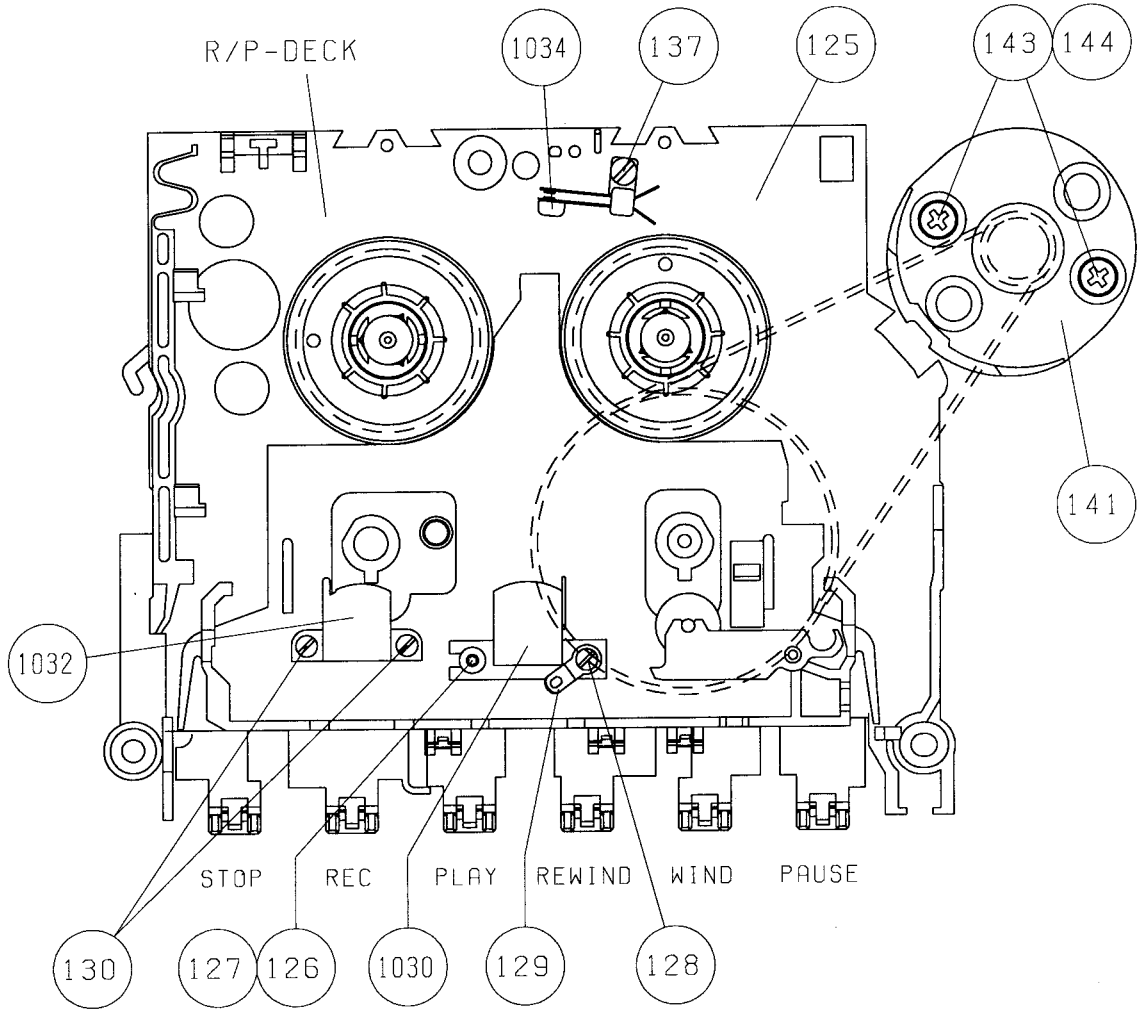
Published by Consumer Electronics Printed in The Netherlands ©Copyright reserved Subject to modification

PHILIPS

PHILIPS

STRIPPED VERSION WITHOUT NOTED ITEMS IS CALLED AND HANDLED AS **RN 0** 4822 691 10296





125	4822 691 10296	RN 0 assy
126	4822 492 51473	spring, azimuth
141	4822 403 53996	support, motor
142	4822 529 10193	damper, motor
143	4822 502 30441	screw, motor
1030	4822 249 10213	head, Rec/Pb mono
1032	4822 249 40309	head, erase
1033	4822 361 21637	motor
1034	4822 271 30598	switch, indication play

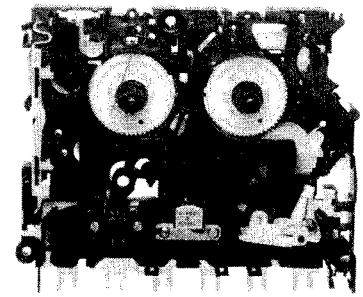
Only those parts of which a service code number is stated are service parts.

General parts

7/67	4822 520 10718	bearing plate
38	4822 520 40134	ball, bearing
40	4822 402 10037	lever, pinch roller right
41/76	4822 528 70646	pinch roller
43	4822 404 10853	slide, key lock
58	4822 358 30929	drive belt RN0 S (long)
98	4822 358 30928	drive belt RN0 D (short)
402	4822 528 20676	take–up clutch assy

(pos. numbers refer to exploded view in General Documentation 4822 725 23763)

Service
Service
Service



45 190 A11

For details and exploded view see Service Manual
of tape transport RN/RR, RDN/RDR
(general documentation)

Service Manual

(GB) MAINTENANCE

It is recommended to clean the recorder after approx. 500 hours of operation.

To be cleaned with alcohol or spirit

- Erase head
- Recording/playback head
- Capstan
- Pressure roller

(F) ENTRETIEN

L'appareil devra être nettoyé après env. 500 heures de marche aux points les plus importants.

Nettoyer les éléments suivants à l'alcool ou à l'alcool à brûler:

- Tête effacement
- Tête enregistrement/reproduction
- Cabestan
- Galet presseur

(NL) ONDERHOUD

Aanbevolen wordt het apparaat na ca. 500 bedrijfsuren schoon te maken

Schoonmaken met alcohol of spiritus:

- Wiskop
- Opneem-/weergeefkop
- Toonas
- Drukrol

(D) WARTUNG

Es empfiehlt sich, das Gerät nach ca. 500 Betriebsstunden zu reinigen

Reinigen mit Alkohol oder Spiritus:

- Löschkopf
- Aufnahme/Wiedergabe-Kopf
- Tonachse
- Andruckrolle

(I) MANUTENZIONE

E consigliabile pulire l'apparecchio dopo circa 500 ore di funzionamento ai punti principali.

Pulire con alcool

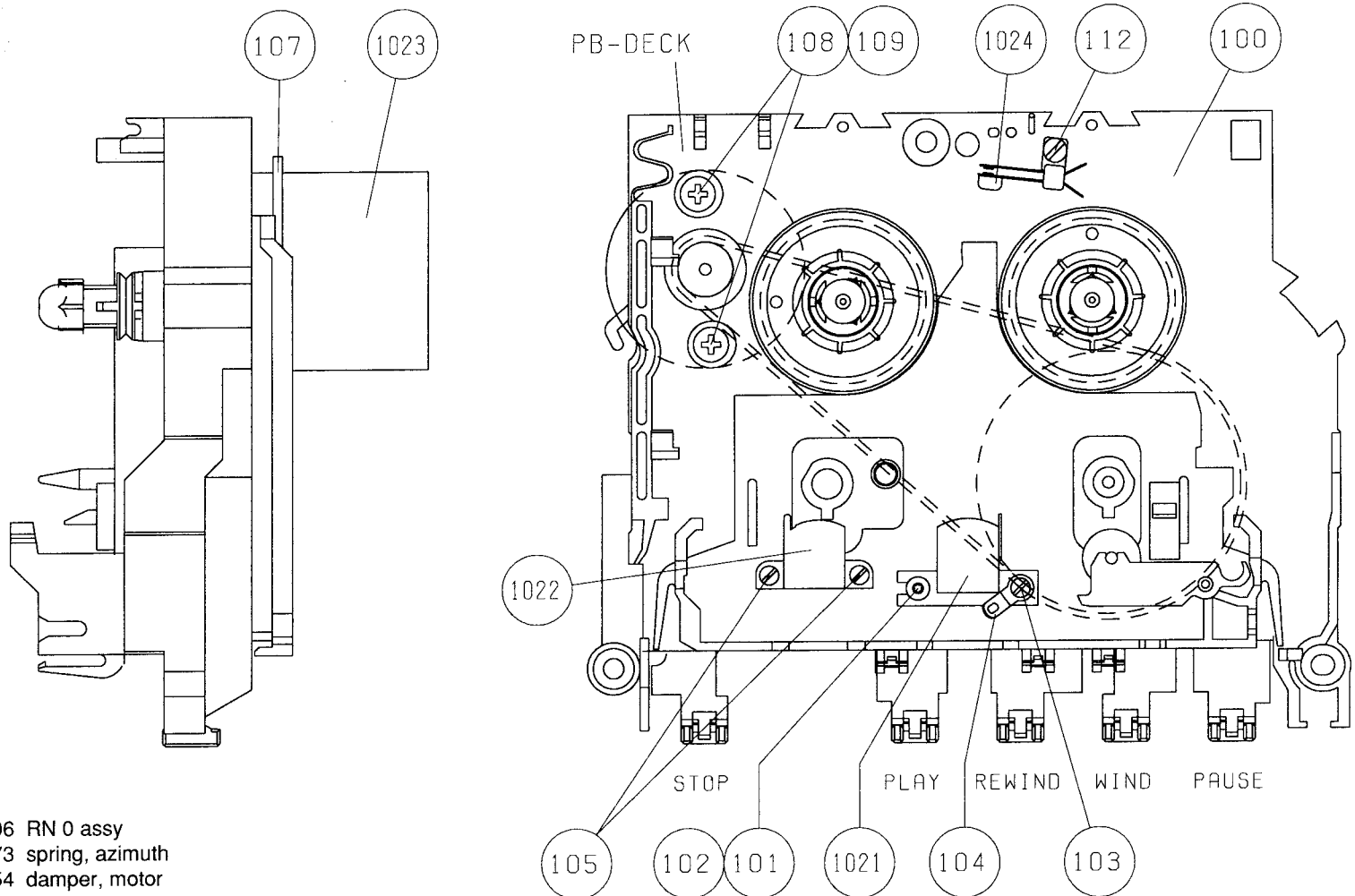
- Testina di cancellazione
- Testina di registrazione/riproduzione
- Capstan
- Rullo preminastro

"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agrées, seuls habilités à réparer votre appareil en panne".

Published by Consumer Electronics Printed in The Netherlands ©Copyright reserved Subject to modification

PHILIPS

STRIPPED VERSION WITHOUT NOTED ITEMS IS CALLED AND HANDLED AS RN 0 4822 691 10296



100	4822 691 10296	RN 0 assy
101	4822 492 51473	spring, azimuth
107	4822 529 10254	damper, motor
108	4822 502 11866	screw, motor
1021	4822 249 10213	head, Rec/Pb mono
1022	4822 404 10685	head, dummy
1023	4822 361 21637	motor
1024	4822 271 30598	switch, indication play

Only those parts of which a service code number is stated are service parts.

General parts

7/67	4822 520 10718	bearing plate
38	4822 520 40134	ball, bearing
40	4822 402 10037	lever, pinch roller right
41/76	4822 528 70646	pinch roller
43	4822 404 10853	slide, key lock
58	4822 358 30929	drive belt RN0 S (long)
98	4822 358 30928	drive belt RN0 D (short)
402	4822 528 20676	take–up clutch assy

(pos. numbers refer to exploded view in General Documentation 4822 725 23763)